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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,997	03/26/2004	Sanjiv Nanda	030645	8496

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QUALCOMM INCORPORATED
5775 MOREHOUSE DR.
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EXAMINER	
AJAYI, JOEL	
ART UNIT	PAPER NUMBER
2617	

NOTIFICATION DATE	DELIVERY MODE
04/21/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/809,997	NANDA, SANJIV	
	Examiner	Art Unit	
	JOEL AJAYI	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 February 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 19, 2008 has been entered.

Response to Arguments

Applicant's arguments with respect to claims 1-30 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time

a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sovio et al. (U.S. Patent Application Number: 2005/0059379)** in view of **Moskowitz et al. (U.S. Patent Number: 7,035,650).**

Consider **claim 1**; Sovio discloses a server terminal configured to operate in a cluster on an ad hoc network backbone (paragraph 22), comprising: a user interface configured to transmit and receive communications during a call with a first terminal connected to an ad hoc network backbone (paragraph 22, line 1 – paragraph 23, line 5); and a processor configured by establishing a route on the ad hoc network backbone for each communication packet transmitted from the second terminal to the third terminal (paragraph 22 and 25).

Except:

Supporting an inter-cluster call between second and third terminals.

In an analogous art, Moskowitz discloses supporting an inter-cluster (scatternet) call between second and third terminals (fig. 1; column 3, lines 27-35; column 4, lines 6-14, 40-54).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teaching of Sovio by including a server that supports inter-cluster/scatternets between terminals, as taught by Moskowitz for the purpose of controlling data communication in an ad hoc network.

Consider **claim 12**; Sovio discloses a method of communications on a server terminal configured to operate in a cluster on an ad hoc network backbone (paragraph 22), comprising: transmitting and receiving communications during a call with a first terminal connected to an ad hoc network backbone (paragraph 22); and establishing a route on the ad hoc network backbone for each communication packet transmitted from the second terminal to the third terminal (paragraph 22).

Except:

Supporting an inter-cluster call between second and third terminals.

In an analogous art, Moskowitz discloses supporting an inter-cluster (scatternet) call between second and third terminals (fig. 1; column 3, lines 27-35; column 4, lines 6-14, 40-54).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teaching of Sovio by including a server that supports inter-cluster/scatternets between terminals, as taught by Moskowitz for the purpose of controlling data communication in an ad hoc network.

Consider **claim 25**; Sovio discloses a server terminal configured to operate in a cluster on an ad hoc network backbone (paragraph 22), comprising: means for a user to participate in a call with a first terminal connected to an ad hoc network backbone (paragraph 22, line 1 – paragraph

23, line 5); and means for establishing a route on the ad hoc network backbone for each communication packet transmitted from a second terminal to a third terminal (paragraph 22).

Except:

Supporting an inter-cluster call between second and third terminals.

In an analogous art, Moskowitz discloses supporting an inter-cluster (scatternet) call between second and third terminals (fig. 1; column 3, lines 27-35; column 4, lines 6-14, 40-54).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teaching of Sovio by including a server that supports inter-cluster/scatternets between terminals, as taught by Moskowitz for the purpose of controlling data communication in an ad hoc network.

Consider **claims 2-11, 13-24**; Moskowitz discloses that the processor is further configured to establish the same route for each of the communication packets transmitted from the second terminal to the third terminal during the inter-cluster call for a first type of call, and to establish a different route for at least two of the communication packets transmitted from the second terminal to the third terminal during the inter-cluster call for a second type of call (fig.1; column 2, lines 19-25; column 4, lines 6-14; column 6, lines 20-36).

Claims 26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sovio et al. (U.S. Patent Application Number: 2005/0059379)** in view of **Moskowitz et al. (U.S. Patent Number: 7,035,650)**, and further in view of **Juitt et al. (U.S. Patent Number: 7,042,988).**

Consider **claim 26**; Sovio discloses a method of communications on a primary server terminal configured to serer a plurality of terminals in a cluster on an ad hoc network backbone

(paragraph 22), the method comprising: using the primary server terminal to support a plurality of calls for a number of the terminals in the cluster by establishing a route on an ad hoc network backbone for each of the communication packets transmitted by each of the terminals (paragraph 22).

Except:

Supporting a plurality of inter-cluster calls for a number of the terminals in the cluster.

In an analogous art, Moskowitz discloses supporting a plurality of inter-cluster calls for a number of the terminals in the cluster (fig. 1; column 3, lines 27-35; column 4, lines 6-14, 40-54).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teaching of Sovio by including a server that supports inter-cluster/scatternets between terminals, as taught by Moskowitz for the purpose of controlling data communication in an ad hoc network.

Sovio and Moskowitz disclose the clamed invention except detecting a server terminal failure; designating one of the terminals in the cluster as a backup server terminal; and processing a message received from the ad hoc network backbone at the backup server terminal, the message being addressed to the primary server terminal.

In an analogous art, Juitt discloses detecting a server terminal failure; designating one of the terminals in the cluster as a backup server terminal (column 5, lines 5-25; column 17, lines 14-37); and processing a message received from the ad hoc network backbone at the backup server terminal, the message being addressed to the primary server terminal (column 5, lines 5-25; column 17, lines 14-37).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teaching of Sovio and Moskowitz by including the detection of a server failure and the designation of a backup server, as taught by Juitt for the purpose of efficiently managing data traffic in wireless networks.

Consider **claims 27 and 29**; Moskowitz discloses that the processor establishes a route on the ad hoc network backbone between an inter-cluster bridge terminal in a first cluster and an inter-cluster bridge terminal in a second network (fig.1; column 2, lines 19-25; column 3, lines 27-35; column 4, lines 6-14; column 6, lines 20-36).

Consider **claims 28 and 30**; Moskowitz discloses that the inter-cluster bridge terminals are Address, Location, and Route (ALR) servers (column 2, lines 19-25; column 4, lines 6-14, 40-54).

Conclusion

Any response to this Office Action should be **faxed to** (571) 273-8300 **or mailed to**:

Commissioner for Patents
P.O. Box 1450
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Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Joel Ajayi whose telephone number is (571) 270-1091. The Examiner can normally be reached on Monday-Friday from 7:30am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Lester Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Joel Ajayi

/Lester Kincaid/
Supervisory Patent Examiner, Art Unit 2617